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#### ABSTRACT

A study investigated the attitudes of vocational education decision makers toward the governance of Minnesota's Area Vocational Technical Institutes (AVTIs) and the impact removal of a local tax to support the AVTIs might have on governance. Five categories of individuals, all considered vocational education decision makers, were surveyed: AVTI board members, legislators, AVTI directors, AVTI superintendents, and State Board Members. participants responded to a twenty-seven-item survey instrument indicating agreement or disagreement to each item on a Likert-type scale. Items addressed the issues of governance, taxation and financial support, satisfaction with the present delivery system of postsecondary vocational education, and the connection between the method of taxation and governance. Respondents agreed that (1) AVTIS should remain under direct management of local boards: (2) the AVTI levy and governance of the AVIIs were connected: (3) the state board, state department of education, and local school boards were doing a good job of delivering vocational education services (they were satisfied with present government structure): and (4) a local tax levy to support AVTIs is appropriate and equitable. (Appendixes, amounting to approximately one-third of the report, include the cpinion survey and data tables and analysis.) (YLB)



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# ATTITUDES OF EDUCATIONAL DECISION MAKERS TOWARDS AVTI GOVERNANCE AND THE LOCAL TAX LEVY

An Independent Paper
(Nine Quarter Credits)
IND 8900, 8901, 8902
Dr. Stephen Miletich, Advisor

Submitted by

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of

Master of Arts

University of Minnesota

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#### CHAPTER 1

#### INTRODUCTION

# Background

Public education in the United States is a state responsibility.

According to Garms, Guthrie and Pierce (1978) "Legal responsibility for public education rests with the states. They have the power to regulate almost every aspect of public education, even though most states delegate important responsibilities to local school districts. Local school districts -- despite their lack of legal authority - are still the basic unit of educational management in America." (pp 348) The legislature has the authority to create and empower school districts to provide public education. The Minnesota legislature has delegated the responsibility of providing postsecondary vocational education to local school boards. Each of the 33 Area Vocational Technical Institutes (AVTI's) that offer postsecondary vocational education in Minnesota is individually managed by a local governing board.

Since school boards do not have the constitutional authority to exist, the extent to which local decision making may be exercised is determined by legislative action at the state level. Decisions regarding source and level of funding (including taxing authority), minimum program standards and of course, authority to locally manage are among the issues that require legislative action.



Campbell, et al., (1975) states that the legislature then is "the big school board" (pp 55) as it's actions becomes the final authority in all school district operations.

Beginning with the late 60's and early 70's most states embarked upon massive school finance reform programs in an attempt to equalize educational opportunities. Minnesota was no exception when, in 1970, as reported by Morley (1972) Wendell Anderson, then a candidate for governor of Minnesota, used school finance reform as a major issue in his campaign. His reform proposals were subsequently acted upon by the Minnesota legislature and efforts continue today to provide more tax equity regarding school finance.

School tax reform has generally taken the form of shifting the tax burden from local sources to state sources. As with all other areas of education, the funding for AVTI's has changed from predominately local funding to more state funding.

Public, postscondary vocational education in Minnesota has experienced tremendous growth since it first began shortly after World War II. The quality and the availability of occupational training in the state is recognized nationally as being exemplary. By almost any standard, Minnesota has developed a successful means by which students may acquire skills necessary for employment.

Since the beginning and through the evolutionary process one element has remained constant, that is individual and



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local management of the AVTI's by local school boards. It may be reasonable to assume then that the local control of the AVTI's has not had an injurious effect on the growth and improvement of postsecondary vocational education. There are however, alternatives to local school board control and in recent years, much discussion has taken place relative to adopting some other form of governance structure that may be more appropriate in light of the broad student base that extends beyond the geographic boundaries of the school district that operate the AVTI's. Also, some argue that the ratio of state/local funding has become so disproportionate that it may be time to remove the control of the AVTI's from the local school boards.

Those who argue in favor of local control point to the success of the AVTI's and claim that this success is due, at least in part, to the responsiveness that accompanies a local form of governance.

In any case, for better or worse, the conditions that would precipitate proposals for changes in governance exist at this time. These changes would necessitate legislative action.

A change that was made by the 1978 Minnesota legislature in the school aids bill removed the requirement for AVTI districts to levy a minimum local property tax that was considered the local contribution of revenues. The local levy was made optional but the district would not keep the

revenues generated through this local tax. This action was considered by some to be the first step in reducing or removing the local control of the AVTI's since it was expected that the AVTI districts would not levy a tax that they could not retain for their own use.

The changes just described did not include any language that reduce local control nor was this implied in the language. The concern then, was with the possible underlying motivations and perceptions of those enacting the changes.

It was the intention of this study to collect, summarize and describe the attitudes of vocational education decision makers, (including those who made the legislative changes) towards the levy, governance and the connection between the two.

This study was precipitated by the change in legislation just described which makes the local tax levy optional rather than required. On the surface, it appeared that there would be no reason to levy. There did however, emerge a concern that has historically been the most frequently raised argument against school finance reform, loss of local control.

Levin and Cohen (1973), conducted a study that concluded that there is no consistent correlation between the percentage of state funding and the degree of local school district autonomy. In contrast to this, many proponents of local control believe that the control of education follows the funding source.



This study represents an attempt to determine how educational decision makers in Minnesota felt towards local control and the financing of the AVTI's.

#### The Problem

The purpose of this study was to assess the attitudes of vocational education decision makers towards governance and financing of Minnesota's AVTI's.

With the change in legislation making the local levy optional, concerns were raised among board members, administrators and legislators relative to the implications this might have on local control. Since legislation regarding education matters usually involves a bargaining process between and among these groups of decision makers, it was determined that an assessment of attitudes held by these individuals towards governance and finance would aid in understanding if there is a perceived relationship between these issues.

# Research Questions

The research questions addressed in this study are as follows:

- Question 1. What are the attitudes of vocational education decision makers towards; local, regional, and state governance of Minnesota's AVTI's?
- Question 2. In the attitudes of vocational education

  decision makers, is there a connection between

  governance and financing of the AVTI's?



- Question 3. As measured by attitude responses, are vocational education decision makers satisfied with the current delivery system of vocational education services?
- Question 4. What are the attitudes of vocational education decision makers towards taxing alternatives as a means of financial support for the AVTI's?

# Significance of the Problem

The question as to whether or not the AVTI's ought to remain under the direct management of individual school boards has received much attention in recent years. One of the arguments in opposition to local school board control, has been that the proportionate share of revenues, used to operate the AVTI's, from local sources is so minimal that local school board control is inappropriate. With the removal of the local AVTI levy, this argument could gain more support.

A major change in governance could occur rather swiftly if education decision makers feel that proposed changes will have a positive effect on postsecondary vocational education. Policy development and legislative change usually involves gathering information on the topic under consideration and polling supporters and opponents. Some topics lend themselves to factual data gathering, others such as governance, will be discussed and perhaps decided from information regarding attitudes towards the issue. This



study represents an attempt to provide feedback to interested persons on attitudes held by groups of education decision makers towards the important issue of AVTI governance.

# Assumptions

Assumptions underlying this study were:

- All persons asked to participate were in educational decision making roles at the time of the study.
- The survey instrument was received by all participants and that those returned were conscientiously and candidly completed.
- 3. All respondents had sufficient knowledge of the topics as to elicit an informed response to the survey instrument.
- 4. The survey instrument and all accompanying materials were not biased towards a particular attitude or set of attitudes.
- 5. The items in the survey instrument address the research questions.

#### Limitations

This study represents an attempt to describe attitudes of respondents at a particular point in time towards the stated research questions.

The following limitations must apply to the study:

 The findings reported in the study describe only the responses to an attitude survey. Non-respondents



cannot be assumed to have the same attitudes as respondents. Further, the attitudes of the population of respondents must be limited to attitudes held at that particular point in time.

 Attitudes, as reported, cannot be assumed to predict future, overt behavior on the part of individual respondents or the whole population.



#### CHAPTER 2

#### REVIEW OF LITERATURE

#### Introduction

There are three areas for which review of literature relating to the study was done. These are: educational governance, attitude measurement and statistical analysis.

This chapter is divided into four sections, each of the areas just described and the summary of related literature.

#### Educational Governance

As has been mentioned in Chapter 1, public education has been historically managed by local boards of education with the permission of state legislatures.

In recent years, there has been an increasing demand for more state emphasis on the control of schools.

Campbell, et al (1975) explain that there are several conditions that have emerged that have caused the states to assume a greater role in public education. The first condition is money. With the costs of education growing proportionately faster than the general economy, local tax revenues have not been able to keep pace with the demands for more, better quality, education. They cite the fact that from 1950 to 1978, the cost of education grew at twice the rate of the gross national product. School districts then looked to the states for increased revenues to meet their demands.



A second condition, that relates to money as well, comes from court decisions requiring equalization of educational opportunities. The courts determined in Serrano that the wealth of the state and not the school district determines the resources behind the student's education.

A further condition that has resulted in an increased state role has been the demand for accountability in education. Several states have enacted accountability legislation to assess how well the schools are doing.

With the development of collective bargaining for teachers, still another condition impacts on the move towards a greater state role in education. Aufderheide, Campbell and Mazzoni (1974) reported that in many states, teachers organizations are the most powerful education interest group. They have found that political contributions, and votes, did influence legislators to the extent that legislatures were willing to accept further responsibility for education, particularly with additional state funding and labor relations laws.

Finally, the federal role in education started to diminish with the Nixon administration as an attempt was made to enhance the states' role in education.

For the decade of the 70's, the states' role in education has steadily increased to where local boards often ask if they truly do control their schools.



Campbell, et al (1975) saw the need for a greater influence by state government in education. Their discussion is not limited to the role of the legislature. They see a need for a stronger department of education and more influence allowed the state boards of education. Campbell and Mazzoni (1974) suggest three models for alternatives in state governance. One increases the authority of the governor, one increases the state education agencies authority to almost complete authority, and the third combines special and general governance. In all three models, however, the role of the state is increased.

In contrast to the argument for increased state governance in education, Garms, Guthrie, and Pierce, (1978) say that:

"We believe that the trend toward professional control of education has gone too far in the United States." (pp 7)

They explain that the movement towards central control by district, state and federal agencies has taken place as an encouragement to professionalism and efficiency. They further believe that these changes permit further direction of education by professional educators and away from the people most effected: parents, students and citizens.

Garms, Guthrie, and Pierce (1978) defend local control on the basis that "government should leave decision making to the smallest unit of government competent to handle them."

(pp 349)



They insist that changes in governance structure should only be made when it can be proven that the state can do a better job of managing schools than can the local districts.

#### Summary

Much has been written about the matter of local vs state vs federal control of education. It would appear that there is no prevailing attitude towards this issue by professionals or lay people. The competing factors, e.g., efficiency, productivity, philosophies, money, all complicate the issue to where there is truly a controversy that crosses idiological as well as economical lines. The tendency over the past decade has been to remove some of the local control of education and place more emphasis on the state and federal governments. The federal government has more recently made an effort to increase the states' role and the local governments have reluctantly allowed the states more direct control of the schools.

The shift in power has clearly been moving towards greater influence by the state legislatures. The literature does not provide a unanimous or unbiased approach to resolving the differences of opinion on the topic, but rather, suggests reasons for changes that have occurred and tries to explain the many influences that exist that have caused these changes.



## Governance of Minnesota's AVTI's

Maack (1977) discussed the findings of his research project on the governance of the AVTI's. He concluded that the present form of governance should be continued where the local board manages the AVTI and the State Board of Education, through the State Department of Education, provides a supportive role in delivering services. This role includes coordination of services, budget review, program approval, broad educational standards, etc.

The method used for this study was one of interviewing four selected policy makers and influentials and examining alternatives in governance. Those interviewed were: two state senators, the assistant commissioner of vocational technical education, and the president of the Minnesota AFL-CIO.

The two senators indicated that there was concern for the present governance structure of the AVTI's and that alternatives may be examined by the legislature. One senator said that "there is no desire to change local control and/or governance" but that the legislature is interested in obtaining more control on how state dollars are spent. The other senator expressed dissatisfaction with the lack of attention that the AVTI's were receiving from the State Board of Education as well as a need for enlarging the AVTI tax base.



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The president of the AFL-CIO expressed a deep interest in preventing the AVTI's from becoming a state system and based his opposition to this notion on the success of the AVTI's under the present structure.

After reviewing the strength of each level of governance, ie. local, state, federal, Maack describes some of the difficulties experienced as a result of this structure. He concludes that the benefits of a locally managed AVTI with support from state and federal sources, exceed the liabilities inherent in this arrangement such that the present structure should be maintained. He further recommends that a legislative study commission should be appointed to examine any potential changes in governance prior to enactment.

In 1977, Systems Factors, Inc., St. Paul, Minnesota, an independent research firm, issued the results of a survey on the Governance of Area Vocational-Technical Institutes.

Participants were: members of the State Board of Education, members of the Higher Education Coordinating Board, the Minnesota Advisory Council for Vocational Education, AVTI Superintendents, AVTI Directors and AVTI board members. With 186 people responding, the following are the results of responses to the items that relate to the present study:

"A new concept of service and governance of the State's AVTI system is needed"

Agree 20.3% Disagree 57.2% No Position 22.5%



"Compared to the State's share, the minimum levy for AVTI's from all sources is so low, 2-20%, that this local dollar support is an argument for the discontinuance of local governance and local autonomy of AVTI's"

Agree 21.5% Disagree 73.1%

"Local Boards of Education should retain governance of local AVTI's"

Agree 71.5% Disagree 11.2% No Position 17.3%

"As with other rost-secondary institutions, a distinct State Board of Vocational Education - apart from the State Board of Education - should be legislatively established"

Agree 24.7% Disagree 67.2% No Position 8.1%

"The State of Minnesota should assume ownership of the AVTI system"

Agree 29.1% Disagree 50.0% No Position 20.9%

The Maack study and the System's Factors Survey, both recently done and directed towards the governance of Minnesota's AVTI's, would seem to indicate a lack of support for any dramatic changes in the governance of Minnesota's AVTI's.

# Attitude Measurement and the Likert Scale

Heathman (1972) used the questionnaire technique to report the attitudes of education decision makers and influentials towards vocational education. While the problem



addressed in Heathman's study was not the same as the one being conducted here, many similarities exist between the two. The method used, including instrument design and population, was very similar to those in this study.

Heathman (1972) indicates that some relationship does exist between attitudes and behavior. Stouffer (1966) suggests that the relationship is more likely to be one of attitudes being brought into line with behavior than behavior as a function of attitude. According to Stouffer, attitude measurement as a prediction of future behavior is probably inappropriate. Thurstone (1967), however, in discussion of the validity of tests of attitudes, states that; "overt behavior need not always be correlated with attitude scores... It is reasonable to conclude, however, that if individuals made a genuine effort to respond according to their own attitudes, these scales are useful in evaluating the beliefs of the respondents, as of the time the responses are given." (pp 78)

In that the research does not indicate support for using attitude measurement as a prediction of future behavior, this study will not attempt to make such predictions but rather, will concentrate on the attitudes themselves.

Oppenhiem (1966) discussed the validity of questionnaire research and concluded that this method has been refined to such a point that reliability and validity of this method can be equal to and often greater than the interview method. He cautions that great care must be taken in instrument



development and administration to achieve favorable results. As for the scaling of attitude responses, he suggests that the Likert type scale that includes five intervals, often experiences reliability coefficients of .85. The Likert type scale assumes an equal interval between responses and permits analysis as a function of arithmetic since there is no absolute zero and there is a true midpoint.

Tuckman (1972) explains the Likert scale as a five point interval scale where response choices are separated in an equal appearing style. Each instrument item consists of a statement or question with a forced choice response from strongly agree to strongly disagree. In addition to scoring responses according to numerical assignment of numbers to intervals, it is also possible to compare responses to oppositely stated items by inverting the interval responses. The data analysis procedures used in this study are based on the equal interval concept of quantifying responses.

Gay (1976), in discussing measures of correlationships, says that for interval scales, the Pearson r measure of correlation is the most appropriate because it includes all responses for the two items being compared and is the most stable measure of correlation. This measure assumes that the relationship between the items being correlated is a linear one.

As a measure of significance, Gay (1976) suggests the use of chi square for data that includes two or more mutually



exclusive categories. This measure compares the frequencies observed to frequencies expected, to determine if there is a significant difference.

For interpretations of the interval data reported in this study, measures of central tendency are simply reported as mean, median and mode values. The measure of variability is reported as the standard deviation, comparisons are stated as Pearson r values, and the significance of response patterns are reported through the chi square values.

#### Summary

The literature relating to educational governance indicates that the local control of education has been a long standing precept of American educational policy.

Post-secondary vocational education in Minnesota has increasingly become more a matter of state rather than local concern primarily due to funding levels. The studies and literature reviewed in this area would seem to indicate the appropriateness of the study of attitudes of decision makers towards the state role in governance of vocational education.

The use of attitude measurement as it relates to a descriptive study appears to be supported by the literature reviewed. While attitudes do not predict behavior, describing attitudes of key persons can be useful in understanding actions that impact on the governance issues

The use of the attitude survey instrate, the Likert type interval scale, and statistical analyses used in this study seem to be supported in the literature.



This literature review then, supports the use of the instrument and the data analysis techniques employed for describing attitudes of educational decision makers towards the research problem.



#### CHAPTER 3

# METHODS AND PROCEDURES

This chapter discusses the selection of the participants for this study, the instrument design, the administration of the instrument, data collection and the methods of data treatment.

# Selection of Participants

All of the participants who were asked to take part in this study were individuals whose positions required them to make decisions directly impacting on postsecondary vocational education. They were: state legislators, area vocational technical institute (AVTI) administrators and members of local and state school boards.

At the time of the study, there were thirty three

AVTI's in the State of Minnesota. Each of these schools has
a school board consisting of elected or appointed members.

These school boards each employ a superintendent of schools
and an AVTI director. The superintendent and AVTI director
are the top two administrators of the AVTI who make
recommendations to the school board on matters concerning
the operation of the AVTI. These three categories of
positions are responsible for all local decisions and are
therefore considered to be vocational education decision
makers.



Since there is considerable state funding of postsecondary vocational education and a great deal of statutory authority controlling the AVTI's, state legislators were considered vocational education decision makers.

The State Board of Education in Minnesota serves as the State Board for Vocational Education. Their decisions direct the State Department of Education and therefore they too were considered vocational education decision makers.

For the purposes of this study, there were five categories of individuals, all of whom were considered vocational educational decision makers. They were: AVTI Board Members, Legislators, AVTI Directors, AVTI Superintendents, and State Board Members. The following table shows the distribution, by category, of all of the vocational education decision makers who were asked to participate.

# TABLE 1 PARTICIPANTS

# Mombors 23

509

AVTI School Board Members	233
Legislators	201
AVTI Superintendents	33
AVTI Directors	33
State Board Members	9

Vocational Education Decision Makers



No attempt was made to survey a sample of the population; all individuals identified as vocational education decision makers were asked to be participants.

#### Instrument Design

Participants were asked to respond to a 27 item survey instrument indicating agreement or disagreement to each item as measured on a five point Likert type scale from strongly agree to strongly disagree. Items were constructed to address the issues of governance, taxation and financial support, and satisfaction with the present delivery system of postsecondary vocational education.

#### Content Validity

The survey instrument to be used for this study was constructed by the researcher, for this intended purpose. In order to establish the validity of the instrument, the following procedure was used.

A pool of sixty items was constructed to address each of the above issues. These items were reviewed by a panel of three subject matter experts and one educational research expert. The panel made recommendations on wording changes, analyzed the meaning of the statements and suggested omissions and additions. From this review, a pool of 27 revised items were incorporated into a sample instrument. Pilot test - The 27 item instrument just described, was administered to a sample population of nine vocational



administrators, and three educational research experts.

The instruments were individually administered and interviews were conducted immediately following the completion of the instrument.

The median time for completion of the instrument was 12 minutes. Each member of the sample group was asked what each statement meant to him/her and if there were suggestions for improvement. There was substantial agreement as to interpretation of items with minor suggestions to improve the clarity of certain items. Respondents were told what the research questions were and were asked if the items clearly addressed these questions. All respondents felt that the items appropriately and clearly addressed the research questions. The suggestions received from the sample group became the basis for refinements that resulted in the final version of the survey instrument. (See Appendix A)

# Administering the Instrument

Copies of the survey instrument with instructions, a cover letter explaining the study and a self-addressed, stamped envelope were mailed to each participant.

The cover letter explained the purpose of the study, identified the researcher and gave the names of the organizations and agencies sponsoring the study. (See Appendix B)

A letter of endorsement from the Minnesota Association of School Administrators accompanied the mailing to AVTI



superintendents and directors. (See Appendix C) A similar letter from the Minnesota School Boards Association accompanied the mailings to board members. (See Appendix D)

In order to guarantee anonymity, the instruments were not individually coded. A different color paper was used for each of the five groups in order to report findings by category of respondents.

Participants were asked to complete an enclosed postcard that was stamped and addressed to a separate location so that the researcher would know who responded and who did not.

(See Appendix E) If a participant chose not to respond, this would be indicated on the card to prevent being contacted during the follow-up.

#### Data Collection

The instruments were mailed on September 18, 1978, to all participants. By November 18, 1978, 244 of the 509 instruments (48%) were returned. Those individuals who did not return the postcard were sent a second instrument on this date with a different cover letter. (See Appendix F) Phone calls were also made to some participants and by December 14, 1978, the total number of completed instruments returned was 306 or 60%. This number was determined to be a sufficient representation from which to report findings.

The following tables indicate responses by group for the first and second mailings.



The following tables indicate responses by group for the first and second mailings.

TABLE 2

RESPONSES TO FIRST MAILINGS

September 18, 1978

•	AVTI Board Members	Legislators	AVTI Superinten- dents	AVTI Directors	State Board Members	Total
Participants Respondents	233 129 55%	201 50 25%	33 30 91%	33 32 97%	9 3 3 %	509 244 48%

TABLE 3

RESPONSES TO SECOND MAILING

November 18, 1978

	AVTI Board Members	Legislators	AVTI Superinten- dents	AVTI Directors	State Board Members	Total
Participants	233	201	33	33	9	509
Respondents	173	67	31	32	3	306
%	74%	33%	94%	97%	33%	60%



Three hundred and twenty four postcards were returned. Nineteen individuals indicated that they chose not to fill out the instrument. Three hundred and five indicated that they had mailed in a completed instrument. This method allowed for complete anonymity of the respondents while at the same time permitted an effective follow-up of non-respondents. With 305 postcards returned indicating agreement to participate and 306 survey instruments received, it can be concluded that this method was highly reliable.

## Treatment of the Data

....

Responses to all twenty seven items on each instrument were tabulated and computed by the University of Minnesota's Cyber 74 computer using various programs from the Statistical Package for the Social Sciences (SPSS).

Items were numbered one through twenty seven with responses assigned numbers one through five for responses strongly agree through strongly disagree, respectively, to facilitate statistical manipulation. Categories of respondents, e.g., superintendents, legislators, were numbered differently on data cards in order to allow reporting of results by group.

All of the instruments received were useable. However, some responses were found to be missing on some instruments. In these cases, that data was treated as missing. No attempt was made to assign a response value to missing data.



For this study, responses to items on the survey instrument were analyzed and reported using the following statistical analyses:

Measures of central tendency - mean, median, mode

Measures of variability - standard deviation

Measures of significance - chi-square

significance level

Frequencies - raw scores, percentages

Relationship - Pearson's product moment

correlation coeficients



#### CHAPTER 4

#### FINDINGS

This chapter describes how participants responded to the items contained in the survey instrument which were designated to address the issues of governance and taxation for Minnesota's AVTI's. The items contained in the survey instrument address four areas of concern that have been stated as research questions in Chapter 1. These areas are governance, taxation, satisfaction with the present delivery systems, and the connection between the method of taxation and governance. Items relating to these four areas are randomly placed in the instrument but for reporting purposes, they are here divided into the area that they address. Each area of concern will be described separately using descriptive and comparative statistics.

## Data Analysis - Items Relating to Governance

Seven items contained in the survey instrument were constructed to ask what the attitudes of respondents are to local, regional or state governance of the AVTI's. Two of these items recommend local governance, two others recommend state governance and one suggests a regional governance structure. Two additional items suggest a system similar to other postsecondary institutions that are here considered to be state systems of governance. All seven of these items are stated in the positive, so that responses indicating



agreement would mean that the respondent agreed with the form of governance spoken to in the statement.

The following are the items that directly relate to the governance issue:

- Item 3 Locally elected school boards should continue
   to operate the AVTI's.

- Item 4 A state system of AVTI's would be more
  efficiently operated and would make better
  use of educational resources.
- Item 23 The AVTI's should be governed by regional vocational education boards of elected officials with taxing authority rather than local school district boards.
- Item 6 Community Colleges and AVTI's have enough in common that they should be merged and controlled by a single agency or board.

Responses to these items are represented in the following (Table 4) in raw numbers as well as percentages. The five point scale was collapsed here to make the table more readable.



TABLE 4

DISTRIBUTION OF RESPONSES TO GOVERNANCE ITEMS

Ite	m .		Members isagree	Legis Agree l	slators Disagree		ectors Disagree	Superin Agree	ntendents Disagree	Sta Agr(-	te Board Disagree		Groups Disagree
3 16	#%	108 63.5	38 22.4	40 59.7	14 20.9	17 53.1	12 37.5	14 48.3	11 37.9	3 100		182 60.5	75 24.9
22	#%	154 89	10 5.8	50 75.8	6 9.1	25 78.1	2 6.3	29 96.7	1 3.3	3 100		261 85.9	19 6.3
4	#%	7 4	160 92.5	4 6.2	49 75.4	4 12.9	21 67.7	0	29 96 <i>27</i>	0	3 100	15 5	262 86.8
23	#%	9 5.2	160 92.5	6 9.1	48 72.7	3 9.7	23 75.2	0	29 100	0	3 100	18 6	263 87.1
20	#	11 6.4	155 90.1	5 13.8	43 66.2	10 32.3	13 41.9	3 10	24 80	0	3 100	33 11	238 79.1
6	# %	18 105	143 83.1	11 16.7	38 57.6	11 34.4	14 43.8	3 10	26 86.7	0	3 100	43 14.2	224 73.9
U	#%	13 7.6	154 89.5	5 7.5	56 83.6	0	31 96.9	5 16.7	25 83.3	0 0	3 100	23 7.6	269 88.5

Responses Item 3 for all groups were 60.5% agree and 24.9% disagree. There was considerable variation between groups with a high of 100% agree for state board members and a low of 48.3% for superintendents. School board members and legislators however, differed very slightly with 63.5% and 59.7% agree respectively.

Item 16 is very closely related to Item 3 except that it speaks to local operation rather than local boards specifically. For all groups, the agree responses were 85.9% of all respondents. There is greater agreement between groups on this item. A possible explanation for the discrepancy between responses on these two items is that the three intermediate district boards are considered by some to be something other than locally elected school boards. Intermediate district board members are not required to be elected, they are appointed by local boards. Items 22, 4, 20 and 6 all propose a statewide system of governance for the AVTI's. All groups responded, disagree to these items. Disagree responses were 86.8%, 87.1%, 73.9% and 88.5% respectively for these items.

A very high percentage of school board members and state board members responded as disagree towards these items. A much lower percentage of AVTI directors responded disagree to these items with the exception of Item 6 where they were almost unanimous in responding disagree to the item with 96.9% disagree and 0% agree. One director responded no opinion.



Item 23 in Table 4 suggests a regional system of governance. 79.1% responded disagree towards this alternative.

Again school board members and state board members responded disagree more frequently than other groups with 90.1% and 100% disagree respectively. AVTI directors were considerably lower with 41.9% disagree and 32.3% agree.

It should be pointed out that state board members responding, were unanimous in their responses with 100% responding as agree or disagree on the respective items. It must be added however, that only 3 state board members responded or 33% of that total group.

Table 5 presents the statistical values, arrived at through the procedures of analysis previously described, for responses to each of the governance items across all groups.

TABLE 5

STATISTICAL VALUES OF RESPONSES FOR ALL
GROUPS TO GOVERNANCE ITEMS

Item #	Mean	Median	Mode	Std.Dev.	Chi-sq.	Significance
3	1.476	1.250	1	.830	50.89177	.0000
16	1.772	1.669	2	.875	33.93619	.0055
22	4.124	4.248	4	. 986	46.58486	.0001
4	4.143	4.282	4	. 990	52.37628	.0000
23	3.938	4.155	4	1.152	72.51352	.0000
20	3.818	4.011	4	1.096	52.44346	.0000
6 .	4.218	4.417	5	1.007	41.80324	.0004



By looking at columns 2 - 4 in Table 5, the average response (mean), the middle of responses (median), and the most frequent response (mode) to each item can be seen.

Column 5 describes how responses varied using the standard deviation as an indicator of variability.

The sixth column, chi square, compares the responses received for any item, to responses expected to be received by chance. This value is then used to compute the significance of the responses received to any given item.

As can be seen in column 7, only Item 16 is greater than the established, acceptable .05 level of significance. Each of the remaining six items relating to governance were below this level and therefore are considered to be statistically significant.

Since these seven items were constructed to measure attitudes relating to the same issue, i.e., governance, it is additionally useful to know how responses correlated from one item to any other item in that category. Table 6 presents these correlations using Pearson's correlation coefficient (r). Coefficients of .4 and larger, expressed in positive or negative values, are considered to be of practical significance for this study.

As can be seen in Table 6, Item 22 correlated very highly with Item 4 and Item 20. Each of these items directly propose a state system of AVTI's. The Pearson r value for these correlations is higher than .6. Item 3 correlated with



TABLE 6

CORRELATIONS (PEARSON r) GOVERNANCE ITEMS

Item	i	3	1	6	22		4		23		20		6	
	Corr	Sig	Corr	Sig	Corr	Sig	Corr	Sig	Corr	Sig	Corr	Sig	Corr	Sig
3	1.000	.001	. 5869	.001	5279	,001	5928	,001	2359	.001	4182	.001	2850	.001
16			1.000	.001	5358	.001	4945	.001	1698	.003	3946	.001	2698	.001
22					1.000	.001	.6317	.001	.4098	.001	.6621	.001	. 4303	.001
4							1.000	.001	. 3290	.001	.5242	.001	.3980	.001
23			,			J \	J	,	1.000	.001	.3120	.001	.1723	.002
20		<b>У</b>									1.000	.001	.4624	.001
6	•												1.000	.001

Items 16, 22, and 4 at least a .5 Pearson r value. Likewise, Items 16 and 22, and 4 and 20 correlated between .5 and .6 on the Pearson r chart.

Somewhat less significant, but worthwhile mentioning, are those correlations between .4 and .5. This would include correlations between items; 3 and 20, 16 and 4, 23 and 22, 6 and 22, 6 and 20.

Three main points are illustrated by the findings so far reported. The first point is that the respondents to the survey instrument were in substantial agreement with a local system of governance for the AVTI's. A look at Table 4, inverting the responses for items stating opposite positions, an average of 80.25% of all respondents agreed with local governance while 10.71% agreed with some other alternative. This is als supported by the measures of central tendency found in Table 5 where mean scores serve to illustrate the average response to a given item by all groups. For each item, agreement or disagreement can be determined by plotting the mean score on a five point scale.

The second point brought out by the findings is that the responses to the survey instrument items being discussed are statistically significant. With one exception, Item 16, all governance items were found to be significant as measured at the .05 level of significance. Even Item 16 was just over this value and four of the seven items were significant at the .001 level.



Finally in comparing responses for governance items, each of the seven items correlated with at least one other item in this category at the accepted .4 Fearson r value. Two correlations were reported above the .6 value and five correlation values were between .5 and .6.

The statistical significance and correlations between responses to the governance items thus far reported, have indicated that there is consistency in responses.

The frequencies of responses to the items and measures of central tendency indicate a group attitude favoring local governance.

## Data Analysis - Items Relating to Taxation

There were thirteen items on the survey instrument that addressed taxation as a means of financial support of the AVTI's.

Six items were constructed to assess attitudes towards the connection between the local levy and local control. Four items ask about the fairness of a local levy verses a broader distribution of financial support. Two items address the adequacy of funding with or without the levy. Finally, one item asks directly if the local boards should continue to levy an AVTI tax. The following are the six items that address the perceived connection between the levy and governance issues;



out if local boards are truly interested in retaining control of the AVTI's.

- Item 13 The AVTI boards should continue to levy a local tax to demonstrate a desire to maintain control of the AVTI's.
- Item 25 If the local levy is eliminated, the local control of vocational education will also be eliminated.
- Item 8 Community input will be decreased if the local . AVTI levy is eliminated.
- Item 27 If an AVTI board is interested in maintaining control of their AVTI, they should include this by approving the discretionary levy.
- Item 17 There is little connection between the local AVTI
   levy and the governance issues.

Table 7 represents the distribution of responses to the above six items by group and for all groups as a measure of agreement/disagreement in raw numbers and in percentages.

By inverting the agree - disagree responses to Item 17 to make it a positive rather than negative statement, and then summarizing the responses for all groups, it is found that 59.0% (of all groups responding) agree that there is a relationship between local control and governance, while 28.05% disagree. State Board members were again the most decisive with 100% agreeing.

For the most part, frequencies of responses for all other groups were fairly evenly distributed with the exception



TABLE 7

DISTRIBUTION OF RESPONSES TO LEVY-GOVERNANCE RELATIONSHIP ITEMS

Ite	m	_	Members isagree	_	lators Disagree		ctors Disagree		itendents Disagree		te Board Disagree		Groups Disagree
13	#%	108 63.5	38 22.4	40 59.7	14 20.9	17 53.1	12 37.5	14 48.3	11 37.9	3 100	0	182 60.5	75 24.9
	# %	115 67.6	43 25.3	44 64.7	13 19.1	18 56.3	12 37.5	17 56.7	9 30.0	3 100	0	197 65	77- 24.5
25	#%	106 61.6	49 28.5	33 50.8	19 29.2	20 64.5	6 19.4	17 56.7	11 36.7	3 100	0	179 59.5	85 28.2
8	# %	101 58.7	50 29.1	38 55.9	22 32.4	18 56.3	11 34.4	19 63.3	9 30	3 100	0	179 58.7	92 30.2
27	#%	86 50.9	55 32.5	36 57,1	14 22.2 .	15 46.9	14 43.8	11 39.3	17 60.7	3 100	~ 0 0	151 51.2	100 33.9
17	#%	43 24.9	105 60.7	18 57.3	33 50.0	9 28.1	22 68.8	11 36.7	17 56.7	0	3 100	81 26.6	180 59.2

of Item 27. This item states that the AVTI's should opt to levy to indicate an interest in local control. Here, a greater percentage of legislators responding agreed with this statement than any other group except state board members with 57.1 agreeing and 22.2% disagreeing. The lowest percentage of agreement with this item was that of superintendents with 39.3% agree and 60.7% disagree. AVTI directors were fairly evenly split on this item with 46.9% agreeing and 43.8% disagreeing.

The following four items were designed to address the fairness/unfairness of a local property tax to support the AVTI's, or more simply, tax equity.

- Item 26 All residents of the state should be assessed a local property tax to support post secondary vocational education.
- Item 12 No local taxes should be used to support post
   secondary vocational education.
- Item 7 It is unfair for residents of an AVTI district to

  pay property taxes to support their AVTI when

  persons living outside the district and not paying

  a similar tax have equal access to programs.
- Item 14 Removing the AVTI levy more equitably distributed the vocational education tax burden.

Table 8 represents the frequencies of responses to the tax equity related items expressed as agree or disagree by raw numbers and percentages for each group and all groups.



While there does exist some range of response preference between groups on certain items, (up to 26.7 percentage points between state board members and legislators on Item 26), a fairly consistant pattern of responses occurs overall. Item 12, that indicates the elimination of local tax support for AVTI's, did however, receive the most directional responses with 75.7% of all groups disagreeing and 16.4% agreeing to the statement.

The following three items each address to ation in a different way. There is not sufficient relationship between these items to report on them as a sub-group. They are simply listed together and labeled as other tax related items in Table 9.

- Item 15 I would like to see my local board continue to levy a local AVTI tax.
- Item 2 Taxes collected locally to support the AVTI's should be added to that AVTI's revenues without penalty in the form of reduced state aids.
- Item 21 I am confident that the legislature will appropriate the necessary funds to support the AVTI's if the local levy is removed.

Item 15 shows that 71.2% of respondents would like to continue with a local AVTI levy while 20.5% disagree with this concept.

Item 2 indicates overwhelming agreement with the idea of the local AVTI retaining, for their own use, the taxes collected through a local levy with 81.2% agreeing and 12.2% disagreeing.



TABLE 8

DISTRIBUTION OF RESPONSES TO TAX EQUITY RELATED ITEMS

Ite	m		Members Disagree		slators Disagree		ctors Disagree		ntendents Disagree	State Agree D	Board isagree		Groups Disagree
26	#%	61 35.7	71 41.5	13 20	39 <sup>-</sup> 60	11 35.7	13 43.3	7 24.1	18 62.1	1 33.3	1 33.3	93 31.2	142 47.7
12	#%	25 14.5	135 78	11 16.4	48 71.6	8 25.8	22 71	6 20	22 73.3	0 0	3 100	50 16.4	230 75.7
7	#%	57 32.9	98 56.6	26 38.8	34 50.7	10 31.3	22 68.8	10 34.5	18 62.1	0 0	3 100	103 33.9	175 57.6
14	#%	62 36	83 48.3	24 35.8	27 40.3	14 43.8	15 46.9	16 53.3	12 40	0 0	3 100	116 38.2	140 46.1

TABLE 9

# DISTRIBUTION OF RESPONSES TO OTHER TAX RELATED ITEMS

` Ite	:m		Members isagree	Legis Agree I	lators Disagree		ectors Disagree		ntendents Disagree		e Board Disagree		Groups Disagree
15		124 72.1	37 21.5	45 68.2	10 15.2	24 75	7 21.9	19 65.5	8 27.6	3 100	0	215 71.2	62 20.5
2	#%	142 83	19 11.1	45 67.2	14 20.9	30 93.8	2 6.3	26 86.7	2 6.7	3 100	0 0	246 81.2	37 12.2
21	# %	72 41.9	69 40.1	34 50.7	22 32.8	13 40.6	16 50	20 66.7	9 30	0	3 100	139 45.7	119 39.1

Responses by all groups are very evenly divided between agree and disagree as to whether or not the legislature would support the AVTI's to the extent necessary should the levy be removed, with 45.7% agreeing and 39.1% disagreeing.

Table 10 represents statistical values placed on responses to taxation items. The measures of central tendencies of responses will serve to describe how all groups answered a given item. The last column on the right is used to identify which items are statistically significant as measured at the .05 level of significance. In this regard, items; 27, 12, 7, 15, and 2 are the items that meet this test. This means that for these items, responses as received were not likely to have occurred by chance.

Table 11 represents the Pearson r values for all thirteen tax related items. All but two of the taxation items correlated above the .4 level with at least one other taxation item. The exceptions were items 2 and 26.

Of all the taxation items, number 13 correlated with more items (6) than did any of the others. It was also the item that correlated to the highest value with a coeficient of .6539 to Item 15. Item 13 proposes that the AVTI's should levy a local tax to demonstrate their interest in local control. Item 15 suggests that the local levy ought to continue.

There are seven pairs of items that correlate between .5 and .6. Twenty-one pairs of items in Table 7 fall between the .4 and .5 levels.

: 54.

TABLE 10

STATISTICAL VALUES OF RESPONSES FOR TAXATION ITEMS

Item	Mean	Median	Mode	Std. Dev.	Chi-Square	Sig.
1	2.476	2.228	2	1.211	18.85997	.2760
13	2.459	2.178	2	1.194	19.13297	.2518
25	2.537	2.267	2	1.180	16.12378	.4444
8	2.583	2.296	2	1.136	15.62365	.4795
2,7	2.733	2.421	2	1.326	43.91263	.0002*
17	3.423	3.723	4	1.251	20.90876	.1820
26	3.153	3.317	4	1.196	23.01973	.1132
12	3.697	3.923	ŀ	1.027	32.17606	.0095
7	3.267	3.655	4	1.203	34.33135	.0049*
14	3.130	3.219	2	11/78	24.20120	.0852
15	2.306	2.074	2	1.134	26.99147	.0416
2	1.896	1.709	. 1	1.046	49.16163	.0000*
21	2.941	2.750	2	1.136	23.10278	.1110

<sup>\*</sup> Significant at .05 level



TABLE 11
PEARSON CORRELATION COEFFICIENT (PEARSON r)

## TAXATION ITEMS - ALL GROUPS

Item 1	13	25	8	27	17	26	12	7	14	15	2	21
1 1.000	. 2802	. 2367	.3134	.4600	2175	0572	1544	1100	1421	.2221	.0625	.1602
13	1.000	.5246	.4671	1797	3625	.0009	. 2333	2906	4562	.6539	.0646	2716
25		1.000	. 5407	.4616	4202	.0318	3397	.0182	4054	.4799	.0217	<del>.</del> .2811
8			1.000	.4228	4021	.0447	3972	2078	3818	.4701	.0734	3103
27				1.000	3118	.1042	1724	-,1109	2098	.4198	0649	2295
17					1.000	. 1094	.4460	. 3592	.4635	.4558	1410	.4820
26						1.000	.1124	. 2442	.1435	0106	.0363	0150
12							1.000	.5343	.5863	-5123	1329	.3852
7								1.000	.4507	4200	1416	.2412
14									1.000	5952	0765	.4598
15										1,000	.1235	0498
2											1.000	0904
21			-									1.000

1

coefficients between items to identify pairs of items that correlate significantly, it can be seen that responses to items relating to taxation (items 26, 12, 7, 14, 15, 2, 21) correlated amongst themselves to a lesser degree than did those items relating to governance (items 1, 13, 25, 8, 27, 17). A possible explanation for this may be the larger number of items and the greater scope of the topic addressed for taxation items as opposed to the more specific topic addressed by governance items. However, for the taxation related items, significance and correlation measures tend to indicate consistency in responses.

Using the .4 and above measure of correlation

# Data Analysis - Items Relating to Satisfaction with Present System

There are seven items that attempt to find out if respondents to the survey instrument are satisfied or dissatisfied with the present delivery system of postsecondary vocational education. Three items are directed at the job that is being done by the local boards, two items ask if the state board of education should continue to be the state board for vocational education and the final two items are intended to measure satisfaction with the present role of the state department of education.

### Satisfaction Items - Local Boards

Item 11 - My local board appears to be well informed about vocational education matters and takes a sincere interest in delivering high quality vocational programs.



- Item 18 Local school boards with control of AVTI's are not spending enough time on AVTI matters because their primary concern is K-12 education.
- Item 24 Individually operated AVTI's have resulted in inconsistancies that are undesireable throughout the state in the delivery of vocational education services.

## Satisfaction Items - State Department of Education

## Satisfaction Items - State Board

- Item 9 I would support legislation that would create a
   separate state board for vocational education.
- Item 19 The State Board of Education should continue to be
   the State Board for Vocational Education.

Table 12 represents agreement/disagreement to satisfaction related items expressed in raw numbers and percentages for each group and for all groups.

The average percentage of agreement/disagreement responses for all groups to items relating to satisfaction with the present system are 74.9% and 11.6% respectively.

Sub-groups of items, i.e., local boards, state board, State Department of Education, were responded to in the following average percentages by all groups:



TABLE 12

DISTRIBUTION OF RESPONSES TO SATISFACTION RELATED ITEMS

Ite 11	m		Members Disagree		lators Disagree				ntendents Disagree		e Board Disagree		Groups Disagree
18	# %		6 . 3.5	49 73.1	6 9.0	25 78.1	7 21.9	28 93.3	32 6.7	3 100	3 0	165 87.5	21 6.9
	# %	17 9.8	141 81.5	7	37 55.2	15 46.9	15 46.9	2 6.7	28 93.3	0 0	3 100	41 13.4	224 73.4
24	#%	13 7.5	123 71.1	11 16.9	37 56.9	11 34.4	19 59.4	0	28 <sup>-</sup> 93.3	0 0	3 100	35 11.6	210 69.3
9	#%	17 9.8	142 82.1	10 14.9	39 58.2	11 36.7	16 53.3	5 16.7	24 80	0	3 100	43 14.2	224 73.9
19	#%	128 74.4	27 15.7	33 50.8	9 13.8	21 65.6	7 21.9	27 90	2 6.7	3 100	0	212 70.2	45 14.9
10	#%	11 5.4	149 86.1	1 1.5	51 75	1 3.1	28 87.5	3 10	26 86.7	0	3 100	16 5.2	257 84
5		108 62.4	34 19.7	39 58.2	6	24 77.4	4 12.9	27 90	2 6.7	3 100	0	201 66.1	46 15.1

Satisfaction with local boards - 76.7% Agree

10.6% Disagree

Satisfaction with State Board - 72% Agree

14.5% Disagree

Satisfaction with State

Department of Education - 75% Agree

10.1% Disagree

Each group of decision makers responded in the same direction to each item with the exception of AVTI Directors' responses to item 18. Here, the responses were evenly split at 46.9% disagree.

Table 13 represents average percentage responses to all satisfaction items reported by group of respondents.

Responses to negatively stated items have been inverted to facilitate averaging.

TABLE 13

AVERAGE PERCENTAGE RESPONSES TO SATISFACTION ITEMS

`			
	Agree	Disagree	
BOARD MEMBER	78.7%	10.4%	
LEGISLATORS	61%	10.8%	
DIRECTORS	66.9%	25.4%	
SUPERINTENDENTS	89.5%	7.6%	
STATE BOARD	100%	0%	

Table 14 represents the measures of central tendency, variability and significance of responses to items relating to satisfaction with the present delivery system.



TABLE 14

STATISTICAL VALUES OF RESPONSES TO

SATISFACTION RELATED ITEMS

Item	Mean	Median	Mode	Std.Dev.	Chi-Square	Sig.
11	1.7	1.545	1	.883	52.99023	.0000*
18	3.769	3.949	4	1.033	80.87467	.0000*
24	3.720	3.879	. 4	1.013	43.62762	.0002*
9	3.827	4.038	4	1.137	56.86910	.0000*
19	2.280	2.117	2	.993	56.18751	.0000*
10	4.023	4.085	4	. 834	29.91282	.0185*
5	2.388	2.203	2	.944	43.93441	.0002*
* Si	gnifican	tat .05	level			

By looking at the far right column, it can be seen that all of the responses received for satisfaction items are below the established .05 level of significance. Therefore, all of these items were responded to in a statistically significant way.

Table 15 represents the correlations of item related to satisfaction with the present delivery system. Only items 18 and 24 correlated at or above the .4 level.

Although most of the responses to these items did not correlate above the accepted statistical levels, agreement disagreement was directional with 74.9% agreeing and 11.6% disagreeing. The reason for relatively low correlations can be attributed to intensity of attitudes towards these items. As an example of this, items 9 and 19 propose essentially



TABLE 15

CORDELATION COEFFICIENTS (DEADSON =) ITEMS DELATING TO SATISFACTION - ALL GROUPS

	CORRELATION	COEFFICIENTS	(PEARSON r)	- ITEMS RELAT	ING TO SATIS	FACTION - AL	L GROUPS
Item	11	18	24	10	5	9	19
11	1.000	4669	4159	2126	. 2182	2600	.2302
18		1.000	.5126	. 2944	1456	. 3442	2870
24		•	1.000	. 2784	2039	.3210	1361
10				1.000	.1049	. 2660	0511
5					1.000	0531	.3821
						1.000	3505
					,		1.000



the same concept, that is, should the State Board of Education continue to be the State Board for Vocational Education or should there be a separate board. Agreement with item 19 should indicate disagreement with item 9. Responses to these items correlated at the -.3505 Pearson r value, below the accepted .4. The following table (Table 16) shows the frequency comparisons as a function of percentage of responses for all groups on these items.

TABLE 16

PERCENTAGES OF RESPONSES BY ALL GROUPS TO

THE ROLE OF THE STATE BOARD

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Item	9	2.6	11.6	11.9	43	30.8
Item	19	15.3	54.8	15.0	12.6	2.3

By summing strongly agree and agree responses and also summing disagree and strongly disagree responses, the overall disagreement to item 9 (73.8%) matches fairly well with the overall agreement to item 19 (70.1%) and likewise, overall agreement with item 9 (14.2%) is similar to overall disagreement with item 19 (14.9%). However, strong disagreement to item 9 (30.8%) is considerably greater than strong agreement with item 19 (15.3%). The Pearson r compares specific responses to items. It does not relate strongly agree with agree, etc. Therefore, while the statistical



significance of the correlation between these items is less than the accepted .4 Pearson r, the practical significance of overall agreement, disagreement to these related items, gives cause for the claim that respondents were consistently answering these items and the results permit conclusions to be drawn based on this consistency. By representing the overall agreement - disagreement in the collaspsed form, a Pearson r correlation of -.9919 would result for the relationship between these two items.

### Summary - Data Analysis

The first three sections of this chapter have described the responses to items on the survey instrument divided by the major area that they address. Sigificant findings have been highlighted by selecting those items or characteristics of items whose responses have indicated some measure of statistical significance.

The tables provided within each section describe how respondents answered each item and are the basis for making statements about the attitudes of respondents towards any item in the instrument. Also included in the tables are statistical data that compares responses to items in quantifiable terms.

Using the data collected and reported in statistical terms, the following statements can be made:



## Responses to Governance Related Items

Responses to governance related items substantially agree with a local form of governance.

The average percentage responses for all groups were: 84.25% agree and 10.7% disagree. This data was arrived at from frequencies of responses and is further supported by the measures of central to ency where the average mean value is .858, the average median is 1.686 and the average mode is 1.714 on the five point scale for all seven items.

## Responses to Items Related to the Connection Between The Local Levy and Governance

Responses to items relating the levy and governance issues tend to agree that there is a connection between the local AVTI levy and the governance of the AVTI's.

The average percentage response to these items was 59.01% agree and 28.05% disagree as reported in the frequencies cable. The average mean value is 2.56, the average median is 2.28 and the average mode is 2 for these items on a five point scale.

## Responses to Items Related to Tax Equity

Responses to items related to tax equity tend to agree that a local property tax to support the AVTI's is fair and equitable.

Responses to these items were less convincing as measured by the average percentage response by all groups of respondents. 56.775% agree and 29.9% disagree.



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The average mean response was 2.688, the median response was 2.471 and the mode is 2.5 on the five point scale.

# Responses to Items Relating to Satisfaction With the Present Delivery System

Responses to items relating to satisfaction of the present delivery system of postsecondary vocational education indicate agreement that the present arrangement of delivery of services is satisfactory.

The average responses to these items by all groups were 74.9% agree and 11.6% disagree as determined by averages of frequency distributions for all items.

The average mean response for all of these items was 2.147, the median was 1.987 and the average mode was 1.857 on the five point scale.

## Internal Consistency

An attempt has been made to support the internal consistency of related items in each section of this chapter through the use of chi square and Pearson r values. As a final note to internal consistency, for all 27 items there were only four occasions when one group of the five rendered an average response that was different in direction than the cher groups responding. That is, when the responses by all groups were agree, each group responded agree except in the four instances noted. Likewise, when all groups disagreed, each group disagreed except as noted. For two items, superintendents responded differently than the majority. On



one item, directors responded differently than the majority and in one case, they were evenly split. Superintendents agreed that removing the local AVTI levy more equitably distributed the tax burden while all other groups disagreed. Superintendents also felt that the AVTI boards should not levy the local tax to show their interest in retaining control of the AVTI's while all of the other groups agreed that they should.

AVTI directors were evenly split as to whether or not the AVTI boards were spending enough time on AVTI matters. The directors also were not sure that the legislature would appropriate enough state funds to support the AVTI's if the levy were removed, while all other groups thought they would.

Responses were, overall, consistent between groups which would indicate that items were interpreted the same by all groups. Internal consistency of the instrument then, has been established through the pilot test, tests of significance, correlations and finally consistency of responses.

For detailed reporting of responses to each item between and among groups of respondents, refer to the appendices G, H, and I. Tables have been provided to represent: 1) how all groups responded to each of the items in the survey instrument, 2) percentages of agreement and disagreement to each item for each group and for all groups and 3) statistical measures of central bendency for all responses on each item.



#### CHAPTER 5

#### SUMMARY AND CONCLUSIONS

This study represents an attempt to describe the attitudes of vocational education decision makers towards the governance of Minnesota's AVTI's and the impact the removal of a local tax to support the AVTI's might have on governance.

The procedures used to gather and analyze the data have been supported through the literature review and responses received have been reported in quantitative, statistical form. The conclusions reported here are summary responses expressed as attitudes of respondents towards the research questions and are bound by the assumptions and limitations stated in the first chapter.

#### Conclusions

Based on the attitudes of the vocational education decision makers who responded to the survey instrument, the following conclusions have been reached:

1. Respondents overwhelmingly agree that the AVTI's should remain under the direct management of local boards. For all items directed at this issue, an average of 80.2% agreed and 10.7% disagreed. More specifically, one item directly made such a statement and 91.1% agreed while only 5.3% disagreed.



2. Respondents agreed that the AVTI levy and governance of the AVTI's were connected. 59% of respondents agreed while 28% disagreed to items directed towards this question. For the item that directly made this statement, 59.4% agreed and 26.7% disagreed.

It is interesting to note that for legislators responding, 59.7% agreed and 20.9% disagreed that the legislature enacted the optional levy change to find out if boards were interested in retaining control of the AVTI's. Board members were slightly higher in their agreement with 63.5% and 22.4% disagree, while AVTI directors and superintendents were considerably lower but still in agreement.

Legislators were higher than any other group, except state board members, in their agreement to the statement that boards should approve the optional levy to demonstrate a desire to retain control of their AVTI.

3. Respondents agree that the state board, the state department of education and local school boards are doing a good job of delivering vocational education services. They are satisfied with the present governance structure.

For all items relating to satisfaction, 74.9% of respondents indicated satisfaction while 11.6% indicated dissaulsfaction.



4. Respondents agree that a local tax levy to support the AVTI's is appropriate and equitable.

For those items relating to the fairness of a local property tax, an average response of 56.7% agreed and 29.9% disagreed that the tax was fair and equitable.

From the above statements that relate to the research questions, the following summary conclusions can be made:

It is the prevailing attitude of vocational education decision makers who responded to the survey instrument used in this study, that: local boards should continue to operate the AVTI's, there is a connection between the AVTI levy and governance issues, the delivery system of postsecondary vocational education is satisfactory and a local property tax to be used for AVT1 purposes is fair and equitable.

#### Recommendations

Because the survey instrument was designed to measure attitudes of respondents at a particular point in time, ie. a time during which legislative change was being enacted, it would not be possible to replicate the study in total with the same groups of respondents under the same conditions. It would be interesting however, to study the following related topics:

- 1. Has the removal of the local AVTI levy affected the governance of the AVTI's?
- 2. How much decision making does take place by local governing boards?



- 3. Do vocational education decision makers continue to support local control of the AVTI's after the change in levy authority?
- 4. Do tax payers feel that the change in levy authority is more equitable now that the change has occurred?
- 5. Have revenues lost by the removal of the local levy been replaced by state revenues?

Finally, it is the recommendation of this researcher that the governance of Minnesota's AVTI's be studied, in depth, to include not only attitudes of decision makers, but also the needs of users, desires of all elements of the community and certainly the benefits to the State of Minnesota.

Hopefully, such a study or studies will be the basis for any future change: or . The of change in the delivery of vocational education services.



#### BIBLIOGRAPHY

- 1. Aufderhende, J. Alen, in Ronald F. Campbell and Tim Mazzoni, Jr., eds., State Policy Making for the Public Schools: A Commarative Analysis (Columbus, Ohio: Educational Governance Project, The Ohio State University, 1974)
- Campbell, Royald F., et. al., <u>The Organization and and Control of American Schools</u>, 3rd edition (Columbus, Ohio: Charles Merrill Publishing Company, 1975)
- 3. Campbell, Fonald F. and Tim Mazzoni, Jr., State

  Governance Models for the Public Schools (Columbus,
  Ohio: Educational Covernance Project, The Ohio State
  University, 1974)
- 4. Coons, John E., et. al., <u>Private Wealth and Public</u>

  <u>Education</u> (Gampridge, Mass: Harvard University Press,

  1970)
- 5. Garms, Walter I., and James W. Guthrie and Lawrence C.

  Pierce, School Finance: The Economics and Politics of

  Public Education (Englewood Cliffs, New Jersey:

  Prestace-Hall, Inc., 1978)
- 6. Gay, L. R., Educational Research: Competencies for

  Analys, and Application (Columbus, Ohio: Charles E.

  Merrill Publishing Company, 1976)



- 7. Heathman, J. E., An Investigation of Attitudes of New Mexico Educational Decision-Makers Toward Vocational

  Education (Unpublished Doctoral Dissertation,
  University of New Mexico, 1972)
- 8. Maack, Vernon R., <u>AVTİ Governance</u> (Alexandria,
  Minnesota: Unpublished Task Force Project, Bush Public
  School Executive Fellows Program, 1977)
- 9. Morley, Anthony, "Minnesota" in <u>A Legislator's Guide to School Finance</u> (Denver, Colo: Education Commission of the States, August 1972)
- 10. Oppenheim, A. N., Questionnaire Design and Attitude

  Measurement (New York: Basic Books, Inc., 1966)
- 11. Stouffer, Samuel A., et. al., Studies in Social

  Psychology in World War II. Vol. 1, Measurement and

  Predication (New York: John Wiley and Sons, Inc.,

  1966)
- 12. Systems Factors, Survey: The Governance of Area

  Vocational-Technical Institutes (St. Paul, Minnesota:

  System Factors, Inc., 1977)
- 13. Thurstone, L. L., <u>The Measurement of Social Attitudes</u>,

  <u>Readings in Attitude Theory and Measurement</u>, ed. Martin

  Fishbein (New York: John Wiley and Sons, Inc., 1967)
- 14. Tuckman, B. W., Conducting Educational Research (Harcourt, Brace, Jovanovich, Inc., 1972)
- 15. University Computer Center: SPSS Reliability
  (University of Minnesota, 1978)



## OPINION SURVEY

ATTITUDES OF EDUCATION DECISION MAKERS TOWARDS THE AVTI LEVY AND THE GOVERNANCE OF THE AVTI'S

#### INTRODUCTION

This survey is part of a study that is currently underway to determine what the attitudes of education decision makers are towards the funding and governance structure of Minnesota's AVTI's. This survey is being sent to all state legislators, all AVTI Superintendents and Directors, all AVTI school board members and members of the State Board of Education.

By completing this questionnaire, you will be contributing to the data that is being collected that may be helpful to decision makers as they work towards improved post secondary vocational education opportunities for students.

Because of the nature of the issues, strict anonymity of respondents is guaranteed by having you mail the enclosed, self-addressed post card to a different address than the survey form which you do not sign and is not coded. By doing this, the researcher will not be able to identify you with the survey, but will be able to follow up on persons not responding.

Completion of this survey should only take about ten (10) minutes of your time. Hopefully you will find it convenient to respond to this request in the very near future.

#### DIRECTIONS

Please read each of the following statements and circle the response that most nearly represents your reaction.

#### **EXAMPLE:**

Vocational education does a good job of preparing students to enter the world of work.

strongly agree



no opinion

disagree

strongly disgree

If you have comments that you would like to add to your response, please include them directly below the question you wish to comment on.

After completing the questionnaire, please place it in the enclosed, self-addressed, stamped envelope and drop it in the mail along with the completed post card that is sent to a separate address (also self-addressed and stamped).



strongly

disagree

disagree

1) By changing the AVTI levy from required to discrement, the legislature is trying to find out if local boards are truly rested in retaining control of the AVTI's. strongly no strongly di agree disagree opinion agree COMMENTS: 2) Taxes collected locally to support the AVTI's should be added to that AVTI's revenues without penalty in the form of reduced state aids. strongly no strongly agree disagree disagree epinion agree COMMENTS: 3) Locally elected school boards should continue to operate the AVTI's. strongly no strongly disagree agree disagree opinion agree **COMMENTS:** 4) A state system of AVTI's would be more efficiently operated and would make better use of educational resources. strongly strongly disagree agree disagree opinion agree COMMENTS: The current direction provided the AVTI's by the State Department of Education, Vocational Division, is effective and adequate. strongly no strongly disagree agree disagree opinion agree COMMENTS: 6) Community Colleges and AVTI's have enough in common that they should be merged and controlled by a single agency or board. strongly strongly disagree agree disagree opinion agree COMMENTS: It is unfair for the residents of an AVTI district to pay property taxes to support their AVTI when persons living outside the district and not paying a similar tax have equal access to programs.

no

opinion

agree

ERIC

Full Text Provided by ERIC

strongly

agree ·

COMMENTS:

Community input will be decreased if the local AVTI levy is eliminated. 8) strongly no strongly disagree agree disagree opinion agree **COMMENTS:** 9) I would support legislation that would create a separate state board for vocational education. strongly no strongly disagree agree disagree opinion . agree COMMENTS: The State Department of Education should have more direct control of 10) the AVTI's. strongly no strongly disagree agree disagree opinion agree COMMENTS: 11) My local board appears to be well informed about vocational education matters and takes a sincere interest in delivering high quality vocational programs. strongly no strongly disagree agree disagree opinion agree COMMENTS: 12) No local taxes should be used to support post secondary vocational education. strongly strongly disagree agree disagree opinion agree COMMENTS: The AVTI boards should continue to levy a local tax to demonstrate a desire 13) to maintain control of the AVTI's. strongly no strongly disagree agree disagree opinion 5 agree **COMMENTS:** 

Removing the AVTI levy more equitably distributes the vocational education tax burden.

strongly no strongly disagree agree disagree opinion agree

COMMENTS:

15) I would like to see my local board continue to levy a local AVTI tax. strongly no strongly disagree agree disagree opinion agree COMMENTS: 16) Locally operated AVTI's can do a better job of delivering vocational education than a state operated system. strongly strongly disagree gree disagree opinion agree COMMENTS:

There is little connection between the local AVTI levy and AVTI governance 17) issues.

strongly no strongly disagree agree disagree opinion agree

**COMMENTS:** 

18) Local school boards with control of AVTI's are not spending enough time on AVTI matters because their primary concern is K - 12 education.

strongly nο strongly disagree disagree agree opinion agree

COMMENTS:

The State board of Education should continue to be the State Board for Vocational Education.

strongly no strongly disagree disagree agree opinion agree

COMMENTS:

I would support the concept of a state AVTI system similar to the State 20) University system or the Community College system.

strongly no strongly disagree disagree agree opinion agree

**COMMENTS:** 

I am confident that the legislature will appropriate the necessary funds 21) to support the AVTI's if the local levy is removed.

scrongly no strongly disagree disagree agree opinion agree

**COMMENTS:** 

22) The AVII's can be more effectively managed through a state governed system. strongly strongly no disagree agree disagree opinion agree **COMMENTS:** The AVTI's should be governed by regional vocational education boards of elected officials with taxing authority rather than local school district boards. strongly strongly no disagree agree disagree opinion agree **COMMENTS:** Individually operated AVTI's have resulted in inconsistencies that are 24) undesireable throughout the state in the delivery of vocational education services. strongly no strongly disagree ' agree disagree opinion agree **COMMENTS:** If the local AVTI levy is eliminated the local control of vocational education 25) will also be removed. strongly strongly no disagree agree disagree opinion agree **COMMENTS:** 26) All residents of the state should be assessed a local property tax to support post secondary vocational education. strongly strongly disagree agree disagree opinion agree COMMENTS: 27) If an AVII board is interested in maintaining control of their AVII, they should indicate this by approving the discretionary levy. strongly

strongly no

disagree agree disagree opinion agree

COMMENTS:



#### APPENDIX B

Dear Vocational Education Decision Maker,

Legislation enacted by the 1978 Minnesota State Legislature changed the local tax levy for post secondary vocational education from a required levy to a discretionary one.

The Minnesota School Boards Association and the Vocational Division of the State Department of Education are jointly sponsoring a study of the AVTI levy and governance of AVTI's. The AVTI Directors Association and the Minnesota Association of School Administrators have given their endorsements to this study. The purpose of this survey is to find out how vocational education decision makers feel this change will effect the finances and governance of the AVTI's.

This survey is being conducted as part of a graduate degree program at the University of Minnesota. The results however, are intended to be a useful tool for persons making important decisions about vocational education.

For the past year, I have been an Education Professions Graduate Leadership Fellow at the University of Minnesota and have concentrated my studies on AVII governance and related issues. I am presently the Director of Transportation and Horticulture programs at the 916 Area Vocational Technical Institute and also an elected member of the Anoka-Hennepin school board.

As an important decision maker in Vocational Education, your opinions about these issues are extremely critical. Would you please take a few minutes of your valuable time to complete the enclosed questionnaire and drop it in the mail? Please do not sign the questionnaire so that your responses will remain completely anonymous. By filling out the enclosed post card and mailing it, I will know who responded.

The AVTI boards will be individually deciding whether or not to levy a local tax by October 10, 1978. Returning your completed questionnaire within a few days will greatly aid in making the data available for this decision making process. If you wish to review the results of this survey, please indicate this on the enclosed post card.

Sincerely,

Jim LiaBraaten

in Jioboth





# Minnesota Association of School Administrators

Alfiliated with the American Association of School Administrators of Minnesota. Alfiliated with the School Administrators of Minnesota. Alfield with the Minnesota Association of Educational Office Personnel

### Dear Superintendents:

Enclosed with this letter you will find a brief stul conducted by Mr. Jim LiaBratten of the Anoka School Board. It is vitally important that you cooperate in answering this brief and anonymous questionnaire. The study is endorsed by MSBA and the MALA Executive Committee. Please help by taking 10-15 minutes of your time to respond.

Sincerely,

John M. Maas

**Executive Secretary** 

Inh M. Maas

JMM/hk

CC: Executive Committee



### MINNESOTA SCHOOL BOARDS ASSOCIATION

1979 CONVENTION JANUARY 15, 16, 17

Box 119 — St. Peter, Minnesota 56082

Tel. 507/931-2450 Metro 612/335-8577 - 336-9141

September 14, 1978

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Foley

VICE PRESIDENT Marjorie Johnson Lake Park

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EXECUTIVE SECRETARY W. A. Wettergren St. Peter Dear School Board Member:

Jim LiaBraaten, member of the Anoka-Hennepin School Board, is doing a study on the Finance and Governance of A.V.T.I. schools. This study has been endorsed by the board of directors of the Minnesota School Boards Association, and members of the Minnesota School Boards Association staff have been assisting Mr. LiaBraaten in preparation of the study.

I urge your assistance to the study by completing the survey as quickly as possible, and returning your forms to Mr. LiaBraaten. May I thank you for your help and cooperation.

Sincerely,

W. A. Wettergren

**Executive Secretary** 

WAW:bl enc.



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DEPT. OF VOCATIONAL EDUCATION 125 Peik Hall University of Minnesota Minneapolis, MN 55455

<u>IMPORTANT</u>
Please complete this card and drop it in the mail.  NAME:
ADDRESS:
I have completed the survey form and mailed it.  I choose <u>not</u> to complete the survey form, please do not contact me for my response.  I would like a copy of the survey results.



#### APPENDIX F

Dear Board Member,

Several weeks ago, you received a questionnal asking your opinions about the AVTI levy and governance issues.

Since I have not received your reply yet, I the kind you to take a few minutes right now to a mplete the attached a provide and return it in the envelope provide.

As you know, this has bean and will continue to be an important issue in vocational education. Your opinions are extremely valuable and highly regarded.

I am requesting your immediate response to this request so that your views can be included in the data that I am collecting from all AVTI board members, all legislators, AVTI directors, AVTI superintendents and the State Board of Education.

n. Die broote

I want to assure you that your responses will remain completely anonymous and that results will be available to you on request.

Sincerely,

im LiaBraaten

Chairman,

Anoka Hennepin School Board

APPENDIX G

## PERCENTAGE OF RESPONSES INDICATING AGREEMENT/DISAGREEMENT

	Board Members Legislators					intendents	State Board		A11	Groups			
Item	Agree D	i:agree		Disagree	Agree	Disagree	Agree	Disagree	Agree :	Disagree	Agree	Disagree	e
	0		3	U	Ü		Ü	Ū	Ū	•			
1	63.5	22.4	59.7	20.9	53.1	37.5	48.3	37.9	100		60.5	24.9	
2	83.0	11	67.2	20.9	93.8	6.3	86.7	6.7	100		81.2	12.2	
3	94.8	2.9	30.0	9.0	84.4	15.6	100		100		91.1	5.2	
4	5.2	92.5	9.1	72.7	9.7	74.2		100	<b></b>	100	6.0	87.1	
5	62.4	19.7	58.2	9.0	77.4	12.9	90.0	6.7	100		66.1	15.1	
6	7.6	89.5	7.5	83.6		96.9	16.7	83.3		100	7.6	88.5	
7	32.9	55.6	38.8	50.7	31.3	68.8	34.5	62.1		100	33.9	57.6	
8	58.7	29.1	55.9	32.4	56.3	34.4	63.3	30.0	100		58.7	30.2	
9	9.8	32.1	14.9	58.2	36.7	53.0	16.7	80.0		100	14.2	73.9	
10	6.4	86.1	1.5	75.0	3.1	87.5	10.0	86.7	<b>-</b>	100	5.2	84.0	,
11	93.6	3.5	73.1	9.0	78.1	21.9	93.3	6.7	160		87.5	6.9	
12	14.5	78.0	16.4	71.6	25.8	71.0	20.0	73.3		100	16.4	75.7	
13	67.6	25.3	64.7	19.1	56.3	37.5	56.7	30.0	100		65.0	25.4	
14	36.0	48.3	35.8	40.3	43.8	46.9	53.3	40.0		100	38.2	46.1	
15	72.1	21.5	63.2	15.2	75.0	21.9	65.5	27.6	100		71.2	20.5	
16	89.0	5.8	75.8	9.1	78 1	6.3	96.7	3.3	100		85.9	6.3	
			27.3	50.0	28.1	68.8	36.7	56.7		100	26.6	59.2	
17	24.9	60.7	10,4	55.2	46.9	46.9	6.7	93.3		100	13.4	73.4	
18	9.8	81.5		13.8	65.6	21.9	90.0		100		70.2	14.9	
19	74.4	15.7	50.8 16.7		34.4	43.8	10.0	36.7	100 ;	100	14.2	73.9	•
20	10.5	83.1	16.7	57.6		50.0	66.7	30.0		100	45.7	39.1	
21	41.9	40.1	50.7	31.8	40.6			96.7		100	5.0	86.8	
22	4.0	92.4	6	11.4	12.9	67.7	10.0			100	11.0	79.1	
23	6.4	90.1	13.8	66.2	32.3	41.9	10.0	80.0		100	11.6	69.3	
24	7.:5		16.9	56.9	34.4	59.4	 c/ 7	93.3	100		59.5	28.2	
25	61.6	28.5	50.8	29.2	64.5	19.4	56.7	36.7	100	22 2			
26	35.7	41.5	20.0	10.0	36.7	43.3	24.1	62.1	33.3	33.3	31.2	47.7	72
27	50.9	32.5	57.!	27.2	46.9	\ 43.8	39.3	60.7	100		51.2	33.9	. •

#### APPENDIX H

#### OPINION SURVEY

Attitudes of Education Decision Makers Towards the AVTI Levy and the Governance of the AVTI's

STATEMENT 1: By changing the AVTI levy from required to discretionary, the legislature is trying to find out if local boards are truly interested in retaining control of the AVTI's.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group				· · · · · · · · · · · · · · · · · · ·		
Board Members	#	36	72	24	31	7
	%	21.1	42.4	14.1	18.2	4.1
Legislators	#	7	33	13	9	5
	%	10.4	49.3	19.4	13.4	7.5
AVTI Directors	#%	6 18.8	11 34.4	3 9.4	8 25.0	4 12.5
Superintendents	#	4	10	4	8	3
	%	13.8	34.5	13.8	27.6	10.3
State Board of Education	#	2	1	0	0	0
	%	66.7	33.3	0	0	0
Column	#	1)2	75	11	14	2 . 7
Total	%	66.4	24.7	3.6	4.6	



STATEMENT 2: Taxes collected locally to support the AVTI's should be added to that AVTI's revenues without penalty in the form of reduced state aids.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group		Ü	J	-	_	-
Board Members	#	76	66	10	18	1
	%	44.4	38.6	5.8	10.5	.6
Legislators	#	8	36	8	9	5
	%	12.1	54.4	12.1	13.6	7.6
AVTI Directors	# %	22 68.8	8 25.0	0 0	2 6.3	0
Superintendents	#	17	9	2	2	0
	%	56.7	30.0	6.7	6.7	0
State Board of Education	#	1	2	0	0	0
	%	33.3	66.7 <sub>8</sub>	0	0	0
Column	#	202	75	11	14	2.7
Total	%	66.4	24.7	3.6	4.6	



STATEMENT 3: Locally elected school boards should continue to operate the AVTI's.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	# %	132 76.3	32 18.5	4 2.3	3 1.7	2 1.2
Legislators	# %	26 39.4	27 40.9	7	6 9.1	0 0
AVTI Directors	# %	18 56.3	9 28.1	0	55 15.6	0 0
Superintendents	# %	24 80.0	6 20.0	0	0 0	0 0
State Board of Education	# %	2 66.7	1 33.3	0 0	0 0	0 0
Column Total	# %	202 66.4	75 24.7	11 3.6	14 4.6	2 .7





STATEMENT 4: A state system of AVTI's would be more efficiently operated and would make better use of educational resources.

		Strongly		No	Dis-	Strongly
Group		Agree	Agree	Opinion	agree	Disagree
Board Members	#	2	7	4	76	84
	%	1.2	4.0	2.3	43.9	48.6
Legislators	#	0	6	12	38	9
	%	0	9.2	18.5	58.5	13.8
AVTI Directors	#	0	3	5	11	12
	%	0	9.7	16.1	35.5	38.7
Superintendents	# %	0	0	0 0	14 48.3	15 51.7
State Board of Education	# %	2 0	16 0	21	139 0	123 100.0
Column	#%	2	16	21	139	123
Total		.7	53	7.0	46.2	40.9

STATEMENT 5: The current direction provided the AVTI's by the State Department of Education, Vocational Division, if effective and adequate.

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Members	# %	14 8.1	94 54.3	31 17.9	29 16.8	5 2.9
Legislators	# %	4 6.1	34 51.5	22 33.3	6 9.1	0
AVTI Directors	# %	3 9.7	21 67.7	3 9.7	2 6.5	2 6.5
Superintendents	# %	8 26.7	19 63.3	1 3.3	2 6.7	0
State Board of Education	# %	2 66.7	1 33.3	0 0	0	0
Column Total	#%	31 10.2	169 55.8	57 18.8	39 12.9	7 2.3

STATEMENT 6: Community Colleges and AVTI's have enough in common that they should be merged and controlled by a single agency or board.

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Members	#	4	9	5	.67	87
	%	2.3	5.2	2.9	39.0	50.6
Legislators	# %	0 0	5 7.6	6 9.1	,41 62.1	14 . 21.2 .
AVTI Directors	#	0	0	1	7	24
	%	0	0	3.1	21.9	75.0
Superintendents	# %	2 6.7	3 10.0	0 0	9 30.0	16 53.3
State Board of Education	#	0	0	0	1	1
	%	0	0	0	33.3	66.7
Column	#	6	17	12	125	143
Total	%	2.0	5.6	4.0	41.3	47.2

STATEMENT 7: It is unfair for the residents of an AVTI

district to pay property taxes to support their

AVTI when persons living outside the district

and not paying a similar tax have equal access

to programs.

Group ,		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	# %	10 5.8	47 27.2	18 10.4	81 46.8	17 9.8
Legislators	# %	3 4.5	23 34.8	7 10.6	29 43.9	4 6.1
AVTI Directors	# %	2 6.3	8 25.0	0	16 50.0	6 18.8
Superintendents	# %	2 6.9	8 27.6	1 3.4	12 41.4	6 20.7
State Board of Education	# %	0 0	0	0 0	0 0	3 100.0
Column Total	# %	17 5.6	86 28.4	26 8.6	138 45.5	36 11.9





STATEMENT 8: Community input will be decreased if the local AVTI levy is eliminated.

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Member	#	27	74	21	46	4
	%	15.7	43.0	12.2	26.7	2.3
Legislators	#	6	32	8	19	2
	%	9.0	47.8	11.9	28.4	3.0
AVTI Directors	#	ر	14	3	8	3
	%	12.5	43.8	9.4	25.0	9.4
Superintendents	# %	5 16.7	14 46.7	2 6.7	9 30.0	0
State Board of Education	# %	2 66.7	1 33.3	0 0	0 0	0
Column	#	44	135	34	82	9
Total	%	14.5	44.4	11.2	27.0	3.0





STATEMENT 9: I would support legislation that would create a separate state board for vocational education.

			Surongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
	Group						
.,	Board Members	# %	5 2.9	12 6.9	14 8.1	79 45.7	63 36.4
	Legislators	# %	2 3.0	8 12.1	18 27.3	31 47.0	7 10.6
	AVTI Directors	# %	1 3.3	10 33.3	3 10.0	10 33.3	6 20.0
	Superintendents	# %	0 0	5 16.7	1 3.3	10 33.3	14 46.7
	State Board of Education	# %	0 0	0	0 0	0	3 100.0
	Column Total	# %	8 2.6	35 11.6	36 11.9	130 43.0	93 30.8



STATEMENT 10: The State Department of Education should have more direct control of the AVTI's.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group			•			
Board Members	#	3	8	13	94	55
	%	1.7	4.6	7.5	54.3	<b>3</b> 1.8
Legislators	#	0	1	16	44	6
	%	0	1.5	23.9	65.7	9.0
AVTI Directors	#	0	1	3	18	10
	%	0	3.1	9.4	56.3	31.3
Superintendents	#	1	2	1	18	8
	%	3.3	6.7	3.3	60.0	26.7
State Board of Education	#	0	0	0	2	1
	%	0	0	0	66.7	33.3
Column	#	4	12	33	176	80
Total	%	1.3	3.9	10.8	57.7	26.2





STATEMENT 11: My local board appears to be w informed about vocational education matters and takes a sincere interest in delivering high quality vocational programs.

Group		Strongly Agree	/ Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	# %	87 50.9	73 42.7	5 2.9	5 2.9	1 .6
Legislators	# %	21 31.8	27 40.9	12 18.2	6 9.1	0
AVTI Directors	#%	12 37.5	13 40.6	0 0	7 21.9	0
Superintendents	#%	22 73.3	6 20.0	0 0	2 6.7	0
State Board of Education	# %	2 66.7	1 33.3	0 0	0 0	0
Column Total	# %	144 47.7	120 39.7	17 5.6	20 6.6	1.3



STATEMENT 12: No local taxes should be used to support post secondary vocational education.

Cmaun		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group						
Board Members	∯	5	20	13	107	28
	%	2.9	11.6	7.5	61.8	16.2
Legislators	#	0	10	8	44	4
	%	0	15.2	12.1	66.7	6.1
AVTI Directors	#	1	7	1	14	8
	%	3.2	22.6	3.2	45.2	25.8
Superintendents	#	0	6	2	16	6
	%	0	20.0	6.7	53.3	20.0
State Board of Education	#	0	0	0	0	3
	%	0	0	0	0	100.0
Column	#	6	43	24	181	49
Total	%	2.0	14.2	7.9	59.7	16.2

STATEMENT 13: The AVTI boards should continue to levy a local tax to demonstrate a desire to maintain control of the AVTI's.

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Members	#	30	85	12	21	11
	%	17.6	50.0	7.1	18.8	6.5
Legislators	#	8	36	11	10	2
	%	11.9	53.7	16.4	14.9	3.0
AVTI Directors	#	7	11	2	9	3
	%	21.9	34.4	6.3	28.1	9.4
Superintendents	#	6	11	4	6	3
	%	20.0	36.7	13.3	20.0	10.0
State Board of Education	# %	2 66.7	1 33.3	0 0	0	0 0
Column	#	53	144	29	57	19
Total	%	17.5	47.7	9.6	18.9	6.3

STATEMENT 14: Removing the AVTI levy more equitably distributes the vocational education tax burden.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	#	5	57	27	61	22
	%	2.9	33.1	15.7	35.5	12.8
Legislators	#	3	21	16	24	3
	%	4.5	31.3	23.9	35.8	4.5
AVTI Directors	#	1	13	3	10	5
	%	3.1	40.6	9.4	31.3	15.6
Superintendents	#	3	13	2	7	5
	%	10.0	43.3	6.7	23.3	16.7
State Board of Education	#	0	0	0	1	2
	%	0	0	0	33.3	66.7
Column	#	12	104	48	103	37
Total	%	3.9	34.2	15.8	33.9	12.2



STATEMENT 15: I would like to see my local board continue to levy a local AVTI tax.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	#	37	87	11	31	6
	%	21.5	50.6	6.4	18.0	3.5
Legislators	#	6	39	11	6	^3
	%	9.2	60.0	16.9	9.2	4 . 6
AVTI Directors	#	8	16	1	3	4
	%	25.0	50.0	3.1	9.4	12.5
Superintendents	#	6	13	2	7	1
	%	20.7	44.8	6.9	24.1	3.4
State Board of Education	# %	2 66.7	1 33.3	0	0 0	0 0
Column	#	59	156	25	47	14
Total	%	19.6	51.8	8.3	15.6	4.7



STATEMENT 16: Locally operated AVTI's can do a better job of delivering vocational education than a state operated system.

Group.		Strongly Agree	Agree	No Opini <i>o</i> n	Dis- agree	Strongly Disagree
Board Members	# %	83 48.0	71 41.0	9 5.2	9 5.2	1 .6
Legislators	# %	12 18.5	37 56.9	10 15.4	6 9.2	0
AVTI Directors	# %	13 40.6	12 37.5	5 15.6	2 6.3	0 0
Superintendents	# %	17 56.7	12 40.0	0	0 0	1 3.3
State Board of Education	# %	2 66.7	1 33.3	0 0	0 0	0 0
Column Total	# %	127 41.9	133 43.9	24 7.9	17 5.6	2 .7

 $\begin{tabular}{ll} \underline{STATEMENT~17}: & There~is~little~connection~between~the~local\\ & AVTI~levy~and~AVTI~governance~issues. \end{tabular}$ 

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Members	-#	12	31	25	70	35
	%	6.9	17.9	14.5	40.5	20.2
Legislators	#	3	15	14	27	6
	%	4.6	23.1	21.5	41.5	9.2
AVTI Directors	#	3	6	1	12	10
	%	9.4	18.8	3.1	37.,5	31.3
Superintendents	#%	3 10.0	8 26.7	2 6.7	9 30.0	8 26.7
State Board of Education	# %	0 0	0	0 .	1 33.3	2 66.7
Column	#	21	60	42	119	61
Total	%	6.9	19.8	13.9	39.3	20.1

STATEMENT 18: Local school boards with control of AVTI's are not spending enough time on AVTI matters because their primary concerns is K - 12 education.

Crour		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group		₹.	. '			
Board Members	#	4	13	15	90	51
	%	2.3	7.5	8.7	<b>52.0</b>	29.5
Legislators	#%	1 1.5	6 9.1	23 34.8	33 50 . 0	3 4.5
AVTI Directors	#	3	12	2	11	4
	%	9.4	37.5	6.3	34.4	12.5
Superintendents	# %	0 0	2 6.7	0	20 66.7	8 26.7
State Board	#	0	0	0	' 2	1
Education	%	0	0	0	66.7	33.3
Column	#	8	33	40	156	₹ 67
Total	%	2.6	10.9	13.2	51.3	22.0

STATEMENT 19: The State Board of Education should continue to be the State Board for Vocational Education.

Group		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Board Members	# %	24 14.0	104 60.5	17 9.9	24 14.0	3 1.7
Legislacors	# % -	1 1.6	31 48.4		7 10.9	2 3.1
AVTI Directors	# %~	9 28.1	12 37.5	4 12.5	6 18.8<	1 3.1
Superintendents	# %	10 33.3	17° 56.7°	1 3.3	1 3.3	1 3.3
State Board of Education	# %	2 66.7	3 <sup>1</sup> / <sub>3</sub> .3	0 0	0 0	0 0
Column Total	# %	46 15.3	165 54.8	45 15.0	38 12.6	7 2.3

STATEMENT 20: I would support the concept of a state AVTI system similar to the State University or the Community College system.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group		J .	Ü	-		
Board Members	# %	1 .6	17 9.9	11 6.4	87 50.6	56 32.6
Legislators	#	1	10	7	5	9
	%	1.5	15.4	26.2	46.2	10.8
AVTI Directors	#	1	10	7	5	9
	%	3.1	31.3	21.9	15.6	28.1
Superintendents	# %	1 3.3	2 6.7	1 3.3	14 46.7	12 40.0
State Board of Education	#	0	0	0	1	2
	%	0 .	0	0	33.3	66.7
Column	#	4	39	36	137	86
Total	%	1.3	12.9	11.9	45.4	28.5



STATEMENT 21: I am confident that the legislature will appropriate the necessary funds to support the AVTI's if the local levy is removed.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	#	5	67	31	55	14
	%	2.9	39.0	18.0	32.0	8.1
Legislators	#	4	29	11	21	1
	%	6.1	43.9	16.7	31.8	1.5
AVTI Directors	#	1	12	3	11	5
	%	3.1	37.5	9.4	34.4	15.6
Superintendents	#	3	17	1	6	3
	%	10.0	56.7	3.3	20.0	10.0
State Board of Education	# %	0 0	0 0	0	2 66.7	1 33.3
Column	#	13	125	46	95	24
Total	%	4.3	41.3	15.2	31.4	7.9



STATEMENT 22: The AVTI's can be more effectively managed through a state governed system.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group						
Board Members	#	3	4	6	83	77
	%	1.7	2.3	3.5	48.0	44.5
Legislators	#	0	4	12	37	11
	%	0	6.3	18.8	57.8	17.2
AVTI Directors	#	1	3	6	12	9
	%	3.2	9.7	19.4	38.7	29.0
Superintendents	#%	0 0	0 0	1 3.3	12 40.0	.17 56.7
State Board of Education	# %	0 0	0	0 0	0	3 100.0
Column	#	4	11	25	144	117
Total	%	1.3	3.7	8.3	47.8	38.9



STATEMENT 23: The AVTI's should be governed by regional vocational education boards of elected officials with taxing authority rather than local school district boards.

		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Group		6	6	F	Ü	
Board Members	#	3	8	6	74	81
	%	1.7	4.7	3.5	43.0	47.1
Legislators	#	0	9	13	33	9
	%	0	14.1	20.3	51.6	14.1
AVTI Directors	#	4	6	8	7	6
	%	12.9	19.4	25.8	22.6	19.4
Superintendents	#	1	2	3	14	10
	%	3.3	6.7	10.0	46.7	33.3
State Board	#	0	0	0	0	3
Education	%	0		0	0	100.0
Column	#	8	25	30	128	109
Total	%	2.7	8.3	10.0	42.7	36.3



STATEMENT 24: Individually operated AVTI's have resulted in inconsistencies that are undesireable throughout the state in the delivery of vocational education services.

		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Group						
Board Members	#	1	12	37	81	42
	%	.6	6.9	21.4	46.8	24.3
Legislators	#	1	10	17	31	5
	%	1.6	15.6	26.6	48.4	7.8
AVTI Directors	#	1	10	2	14	5
	%	3.1	31.3	6.3	43.8	15.6
Superintendents	# %	0 0	0	2 6.7	21 70.0	7 23.3
State Board of Education	# %	0	0	0 0	1 33.3	2 66.7
Column	#	3	32	58	148	61
Total	%	1.0	10.6	19.2	49.0	20.2



STATEMENT 25: If the local AVTI levy is eliminated the local control of vocational education will also be removed.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	#	30	76	17	39	10 ·
	%	17.4	44.2	9.9	22.7	5.8
Legislators	#	5	28	13	17	1
	%	7.8	43.8	20.3	26.6	1.6
AVTI Directors	#	4	16	5	4	2
	%	12.9	51.6	16.1	12.9	6.5
Superintendents	# %	4 13.3	13 43.3	2 6.7	10 33.3	1 3.3
State Board of Education	# %	1 33.3	2 66.7	0 0	0 0	0
Column	#%	44	135	37	70	14
Total		14.7	45.0	12.3	23.3	4.7





STATEMENT 26: All residents of the state should be assessed a local property tax to support post secondary vocational education.

		Strongly Agree		No Opinion	Dis- agree	Strongly Disagree
Group		8	.0	•	J	
Board Members	#	4	57	39	56	15
	%	2.3	33.3	22.8	<b>32</b> .7	8.8
Legislators	#	0 .	13	13	30	8
	%	0	20.3	20.3	46.9	12.5
AVTI Directors	#	3	8	6	8	5
	%	10.0	26.7	20.0	26.7	16.7
Superintendents	#	2	5	4	13	5
	%	6.9	17.2	13.8	44.8	17.2
State Board of Education	# %	0 0	1 33.3	1 33.3	0	33.3
Column	#	9	84	63	107	34
Total	%	3.0	28.3	21.2	36.0	11.4



STATEMENT 27: If an AVTI board is interested in maintaining control of their AVTI, they should indicate this by approving the discretionary levy.

Group		Strongly Agree	Agree	No Opinion	Dis- agree	Strongly Disagree
Board Members	#	18	68	28	41	14
	%	10.7	40.2	16.6	24.3	8.3
Legislators	#	2	34	13	8	6
	%	3.2	54.0	20.6	12.7	9.5
AVTI Directors	#	5	10	3	6	8
	%	15.6	31.3	9.4	18.8	25.0
Superintendents	# %	4 14.3	7 25.0	0	9 32.1	8 28.6
State Board of Education	#	2	1	0	0	0
	%	66.7	33.3	0	0	0
Column	#	31	120	44	64	36
Total	%	10.5	40.7	14.9	21.7	12.2



APPENDIX I MEASURES OF CENTRAL TENDENCY AND COMPARATIVE STATISTICS -

ALL GROUPS

# Median Mode Std.Dev. Chi Square Sig. Item Mean

1. 2.476 2.228 2.000 1.211 18.85997 2. 1.896 1.709 1.000 1.046 49.16163	.2760
3.       1.476       1.250       1.000       .830       50.89177         4.       4.143       4.282       4.000       .990       52.37628         5.       2.388       2.203       2.000       .944       43.93441         6.       4.218       4.417       5.000       1.007       41.80324         7.       3.267       3.655       4.000       1.202       34.33135         8.       2.583       2.296       2.000       1.136       15.62365         9.       3.827       4.038       4.000       1.137       56.86910         10.       4.023       4.085       4.000       .834       29.91282         11.       1.700       1.545       1.000       .883       52.99023         12.       3.697       3.923       4.000       1.027       32.17606         13.       2.459       2.170       2.000       1.178       24.20120         15.       2.306       2.074       2.000       1.178       24.20120         15.       2.306       2.074       2.000       1.34       26.99147         16.       1.772       1.669       2.000       875       33.93619      <	.0000 .0000 .002 .0004 .0049 .4795 .0000 .0185 .0095 .2618 .0416 .0055 .1820 .0000 .0000 .0000 .1110 .0000 .0000 .4444 .1132

